CLAIMS

What is claimed is:

1   1.   A client system for gathering information via a network by voice input comprising:

2   a speech recognition engine installed on said client system;

3   a communication component installed on said client system configured to

4   establish communications with a communication component on a server system which

5   provides access to information stored on said server; and

6   a voice navigation component configured to provide information-dependent

7   grammars from said server to said speech recognition engine via said communication

8   component based on initial information loaded from said server to said client and

9   configured to process results of said speech recognition system.

10   2.   The system according to claim 1, wherein said speech recognition engine further

2   includes a speech synthesis engine.

1   3.   The system according to claim 1, wherein said communication component on

2   said client system and said voice navigation component form an integral component.

1   4.   The system according to claim 1, wherein said communication component on

2   said client system is a browser.

1   5.   The system according to claim 1, wherein said voice navigation component is

2   configured to locate, select, and initialize a speech recognition engine and a speech

3   synthesis engine, and to enable and disable information-dependent grammars, and to

4   process recognition results from said speech recognition engine.

1   6.   The system according to claim 1, wherein said network is an Intranet or an

2   Internet.

1   7.   A client-server system comprising:

2   a client having a speech recognition engine and a speech synthesis engine, a

3 client communication component configured to establish communications with a server,

4 and a voice navigation component configured to provide information-dependent

5 grammars from said server to said speech recognition engine via said client

6 communication component based on initial information loaded from said server to said

7 client and further configured to process results of said speech recognition engine; and

8   a server having a server communication component configured to establish

9 communication with a client, a voice navigation component configured to provide

10 information-dependent grammars from said server to said speech recognition engine

11 based on said initial information and further configured to process said results of said

12 speech recognition engine, wherein said voice navigation component is available for

13 download to and execution on said client, and said information-dependent grammars

14 are available for download to and execution on said client.

1   8.   A method for gathering information via a network by voice input comprising:

2   loading an initial information from a server in a client using a communication

3 component;

4   automatically loading an information-dependent grammar in said client by using

5 access information contained in said initial information and automatically providing said

6 information-dependent grammar to a speech recognition engine disposed in said client

7 for recognizing spoken words defined by said information-dependent grammar;

8   sending results of said speech recognition engine to a voice navigation

9 component; and

10   processing results of said speech recognition engine in said voice navigation

11 component.

1   9.   The method according to claim 8, wherein said information-dependent grammar

2 defines possible input values of Web related Web pages, Web pages belonging to a

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3   Web application, or a related Web application.

1   10.   The method according to claim 8, wherein said initial information is a Web page

2   made available by said server.

1   11.   The method according to claim 10, wherein said initial Web page contains a

2   reference to said voice navigation component stored on said server.

1   12.   The method according to claim 11, wherein each initial Web page contains a

2   reference to a point-and-click component stored on said server.

1   13.   The method according to claim 12, further comprising:

2   automatically identifying reference information in said initial Web page for

3   accessing said voice navigation component and said point-and-click component, and

4   automatically loading said voice navigation component and said point-and-click

5   component from said server to said client using said reference information.

1   14.   The method according to claim 13, further comprising:

2   automatically associating said identified reference information with

3   information-dependent grammars in said initiating Web page;

4   automatically loading said identified information-dependent grammar in said

5   client; and

6   providing said speech recognition engine with access to said

7   information-dependent grammar via said voice navigation component.

1   15.   The method according to claim 12, wherein said voice navigation component and

2   said point-and-click component have a common user-interface including user selectable

3   options.

1   16.   The method according to claim 15, wherein said voice navigation component

2   user interface includes options for selecting information-dependent grammars stored on

3   said server.

1   17.   The method according to claim 8, wherein said voice navigation component is

2   configured to process a spoken response, a change of browser content, and an

3   HTTP-request to load a new application, applet, or Web page.

1   18.   The method according to claim 8, wherein said voice navigation component is

2   configured to redraw a content frame, to retrieve information from a server, and to

3   initiate a server-based transaction from said speech recognition and synthesis engine.

1   19.   A machine-readable storage, having stored thereon a computer program having

2   a plurality of code sections executable by a machine for causing the machine to

3   perform the steps of:

4   loading an initial information from a server in a client using a communication

5   component;

6   automatically loading an information-dependent grammar in said client by using

7   access information contained in said initial information and automatically providing said

8   information-dependent grammar to a speech recognition engine disposed in said client

9   for recognizing spoken words defined by said information-dependent grammar;

10   sending results of said speech recognition engine to a voice navigation

11   component; and

12   processing results of said speech recognition engine in said voice navigation

13   component.

1   20.   The machine-readable storage according to claim 19, wherein said

2   information-dependent grammar defines possible input values of Web related Web

3   pages, Web pages belonging to a Web application, or related Web applications.

1   21.   The machine-readable storage according to claim 19, wherein said initial
2   information is a Web page made available by said server.

1   22.   The machine-readable storage according to claim 21, wherein said initial Web
2   page contains a reference to said voice navigation component stored on said server.

1   23.   The machine-readable storage according to claim 22, wherein each initial Web
2   page contains a reference to a point-and-click component stored on said server.

1   24.   The machine-readable storage according to claim 23, further comprising:
2   automatically identifying reference information in said initial Web page for
3   accessing said voice navigation component and said point-and-click component and
4   automatically loading said voice navigation component and said point-and-click
5   component from said server to said client using said reference information.

1   25.   The machine-readable storage according to claim 24, further comprising:
2   automatically associating said identified reference information to
3   information-dependent grammars in said initiating Web page;
4   automatically loading said identified information-dependent grammar in said
5   client; and
6   providing said speech recognition engine with access to said
7   information-dependent grammar via said voice navigation component.

1   26.   The machine-readable storage according to claim 23, wherein said voice
2   navigation component and said point-and-click component have a common user-
3   interface including user selectable options.

1   27.   The machine-readable storage according to claim 26, wherein said voice

2   navigation component user interface includes options for selecting

3   information-dependent grammars stored on said server.

1   28.   The machine-readable storage according to claim 23, wherein said voice

2   navigation component is configured to process a spoken response, a change of

3   browser content, and an HTTP-request to load a new application, applet, or Web page.

1   29.   The machine-readable storage according to claim 23, wherein said voice

2   navigation component is configured to redraw a content frame, to retrieve information

3   from a server, and to initiate a server-based transaction from said speech recognition

4   and synthesis engine.